

FANUC Robot M-2000



FEATURES

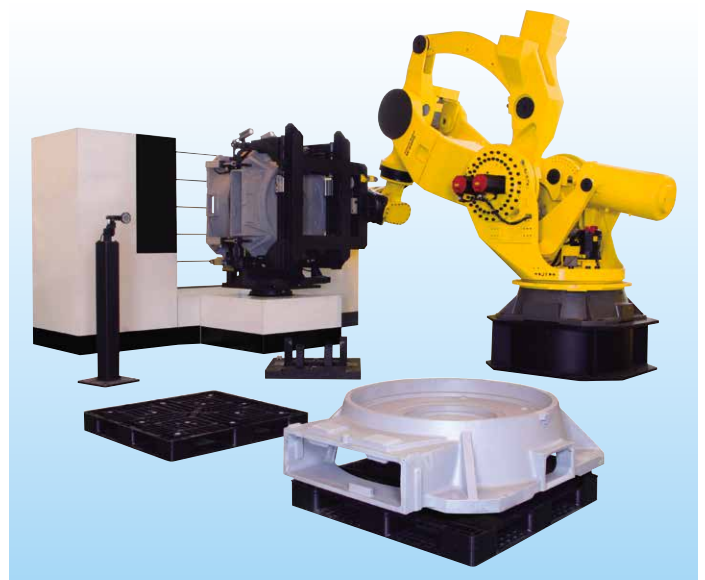
“Super Heavy Payload Robot” FANUC Robot M-2000 is the heavy payload robot with a payload capacity of 900kg - 2300kg.

- Four models are available to meet a variety of applications.
 - **FANUC Robot M-2000/1200F-37A**
FANUC Robot M-2000/2300F-37A
These models are heavy payload Types which have 1200kg (1350kg option) and 2300kg payload capacity, and have 3.7m reach and 4.6m vertical stroke.
They can be applied to handling of heavy work piece such as large castings and structures.
 - **FANUC Robot M-2000/900F-47A**
FANUC Robot M-2000/1700F-47A
These models are long arm Types which have 900kg and 1700kg payload, and have 4.7m reach and 6.2m vertical stroke. These models have a wide motion envelope and can be applied to lifting and handling large size structures.
- The wrist can be used safely in harsh environment because it has IP67-equivalent resistance to environmental conditions (dust and dips).
- Latest intelligent functions with *i*RVision (integrated robot vision) are available.

Application Examples



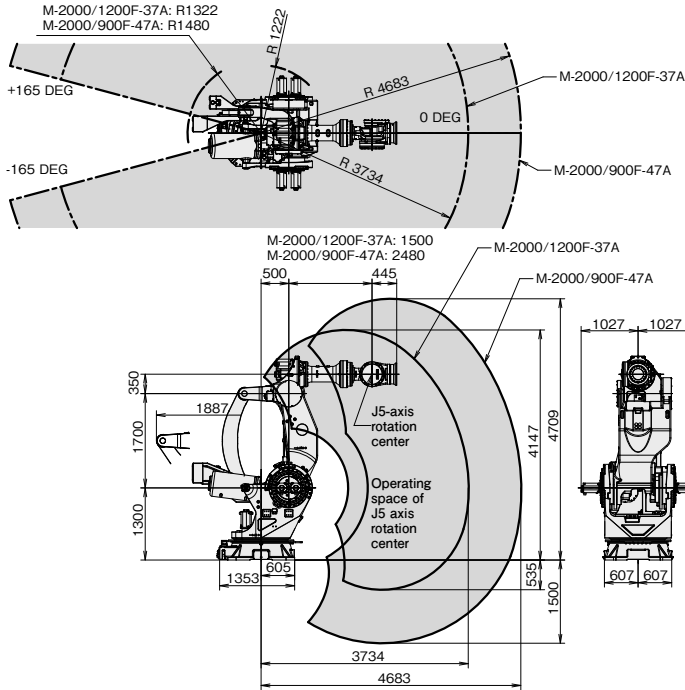
Completed car handling by M-2000/1700F-47A



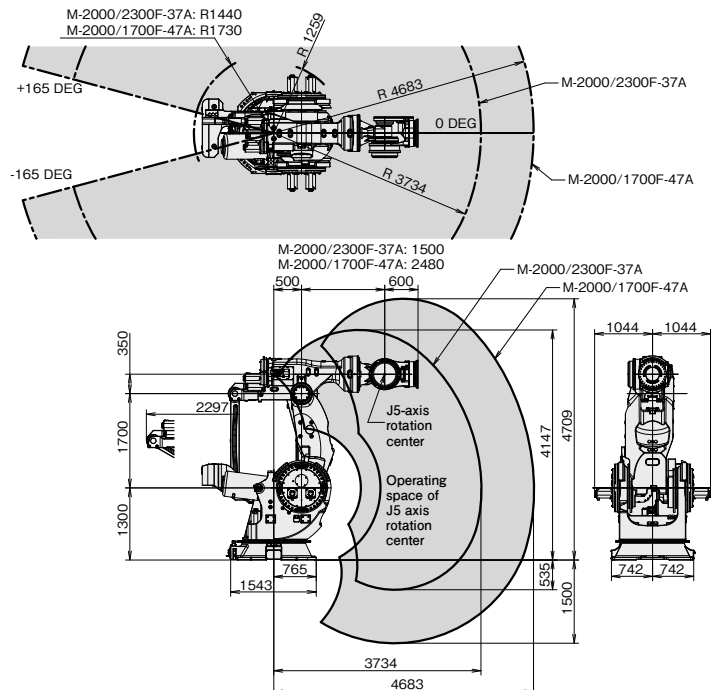
Large casting machine tending by M-2000/1200F-37A

Operating space

M-2000/1200F-37A, /900F-47A



M-2000/2300F-37A, /1700F-47A



Specifications

Model		M-2000/1200F-37A	M-2000/900F-47A	M-2000/2300F-37A	M-2000/1700F-47A
Type		Articulated Type			
Controlled axes		6 axes (J1, J2, J3, J4, J5, J6)			
Reach		3734 mm	4683 mm	3734 mm	4683 mm
Installation		Floor			
Motion range (Maximum speed) (Note 1)	J1 axis rotation	330° (45°/s) 5.76 rad (0.79 rad/s)		330° (20°/s) 5.76 rad (0.35 rad/s)	
	J2 axis rotation	160° (30°/s) 2.79 rad (0.52 rad/s)		160° (14°/s) 2.79 rad (0.24 rad/s)	
	J3 axis rotation	165° (30°/s) 2.88 rad (0.52 rad/s)		165° (14°/s) 2.88 rad (0.24 rad/s)	
	J4 axis wrist rotation	720° (50°/s) 12.57 rad (0.87 rad/s)		720° (18°/s) 12.57 rad (0.31 rad/s)	
	J5 axis wrist swing	240° (50°/s) 4.19 rad (0.87 rad/s)		240° (18°/s) 4.19 rad (0.31 rad/s)	
	J6 axis wrist rotation	720° (70°/s) 12.57 rad (1.22 rad/s)		720° (40°/s) 12.57 rad (0.70 rad/s)	
Max. load capacity at wrist		1200 kg 1350 kg (Note 2)	900 kg	2300 kg	1700 kg
Max. load capacity at J2 base		550 kg			
Max. load capacity at J3 arm		50 kg			
Allowable load moment at wrist	J4 axis	14700 N·m	1500 kgf·m	29400 N·m	3000 kgf·m
	J5 axis	14700 N·m	1500 kgf·m	29400 N·m	3000 kgf·m
	J6 axis	4900 N·m	500 kgf·m	8820 N·m	900 kgf·m
Allowable load inertia at wrist	J4 axis	2989 kg·m ²	30500 kgf·cm·s ²	7500 kg·m ²	76531 kgf·cm·s ²
	J5 axis	2989 kg·m ²	30500 kgf·cm·s ²	7500 kg·m ²	76531 kgf·cm·s ²
	J6 axis	2195 kg·m ²	22400 kgf·cm·s ²	5500 kg·m ²	56122 kgf·cm·s ²
Drive method		Electric servo drive by servo motor			
Repeatability (Note 3)		± 0.18 mm			± 0.27 mm
Mass (Note 4)		8600 kg	9600 kg	11000 kg	12500 kg
Installation environment		Ambient temperature : 0 to 45°C Ambient humidity : Normally 75 %RH or less (No condensation allowed) Short term (within one month) Max. 95 %RH or less (No condensation allowed) Vibration acceleration : 4.9 m/s ² (0.5G) or less			

Note 1) During short distance motions, the axis speed may not reach the maximum value stated.

Note 2) With 1350kg option. Maximum speed of J2 axis will be 25°/s.

Note 3) Compliant with ISO 9283.

Note 4) Without controller.

FANUC CORPORATION

• Headquarters 3580, Shibokusa, Oshino-mura, Minamitsuru-gun
Yamanashi, 401-0597, JAPAN
Phone: (+81)555-84-5555 <https://www.fanuc.co.jp/>

• Overseas Affiliated Companies
FANUC America Corporation
FANUC Europe Corporation, S.A.
SHANGHAI-FANUC Robotics CO., LTD.
KOREA FANUC CORPORATION
TAIWAN FANUC CORPORATION
FANUC INDIA PRIVATE LIMITED
FANUC SINGAPORE PTE. LTD.
FANUC THAI LIMITED
FANUC MECHATRONICS (MALAYSIA) SDN. BHD.
PT. FANUC INDONESIA
FANUC OCEANIA PTY. LIMITED
FANUC SOUTH AFRICA (PROPRIETARY) LIMITED

Phone: (+1)248-377-7000
Phone: (+352)727777-1
Phone: (+86)21-5032-7700
Phone: (+82)55-278-1200
Phone: (+886)4-2359-0522
Phone: (+91)80-2852-0057
Phone: (+65)6567-8566
Phone: (+66)2-714-6111
Phone: (+60)3-3082-1222
Phone: (+62)21-4584-7285
Phone: (+61)2-8822-4600
Phone: (+27)11-392-3610

<https://www.fanucamerica.com/>
<https://www.fanuc.eu/>
<https://www.shanghai-fanuc.com.cn/>
<https://www.fkc.co.kr/>
<https://www.fanuctaiwan.com.tw/>
<https://www.fanucindia.com/>
<https://www.fanuc.com/fsp/>
<https://www.fanuc.com/fth/>
<https://www.fanuc.com/fmm/>
<https://www.fanuc.com/fin/>
<https://www.fanucoceania.com.au/>
<https://fanuc.co.za/>

• All specifications are subject to change without notice.
• No part of this catalog may be reproduced in any form.
• The products in this catalog are controlled based on Japan's "Foreign Exchange and Foreign Trade Law". The export from Japan may be subject to an export license by the government of Japan. Further, re-export to another country may be subject to the license of the government of the country from where the product is re-exported. Furthermore, the product may also be controlled by re-export regulations of the United States government. Should you wish to export or re-export these products, please contact FANUC for advice.

© FANUC CORPORATION, 2024

RM-2000(E)-01, 2024.4, Printed in Japan